

**PHENOM**<sup>®</sup>  
BY EMBRAER

**EMBRAER**  
*Executive Jets*



# PROGRESS REPORT

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**APRIL 2008 – VOLUME 3 – ISSUE 3**

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## **From the desk of Luís Carlos Affonso**

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This is a moment of great celebration! The Phenom 300 jet has just performed its maiden flight, departing from Embraer's test runway in Gavião Peixoto, São Paulo.

The jet's successful first flight gives us great pleasure in commemorating this important milestone, which was achieved ahead of the schedule we announced at the program launch in 2005.

Other achievements are yet to come, followed by the greatest one: delivering to our customers an excellent flight experience aboard a truly revolutionary executive jet – the Phenom 300.

Also making steady progress, the Phenom 100 steps into the maturity campaign. The dedicated jet was exposed to extreme cold and succeeded in all tests.

I am honored to share with you such great news!

Luís Carlos Affonso

## **The Phenom Programs**

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Announced in May 2005, the Phenom 100 performed its first flight in July 2007 and four aircraft are currently in the Flight Test campaign. The Phenom 300 performed its first flight in April 2008. The jets are expected to enter into service in the second half of 2008 and in the second half of 2009, respectively.

The Phenom jets are clean-slate designs, envisioned to offer premium comfort, outstanding performance and low operating cost. Embraer has partnered with renowned aviation industry leaders to manufacture and support the Phenom 100 and Phenom 300.



## The Phenom 100 Program

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### Certification and maturity campaigns

**Cold Soak Test** – The fourth Phenom 100 successfully concluded, on April 14, the low temperature tests, as part of the aircraft's maturity campaign. The test was performed at the renowned Eglin U.S. Air Force base in Florida with the objective of confirm the resistance and functionality of the aircraft and its components in extreme cold temperature conditions.

**Results** – On its first journey to the United States, the Phenom 100 was placed in a cold chamber for over 12 hours, supporting temperatures as low as -40°F (-40°C). Tests were performed on the engines, systems, batteries, doors, cabin and other components, with positive results. The low temperature test campaign not only confirmed the aircraft functionality in extreme conditions, but also generated valuable information for more robust and simplified procedures in cold climate operation.

**Flutter test** – The Phenom 100, which is designed to achieve Mach 0.70, has concluded the flutter test successfully. The jet has met all the certification requirements and achieved Mach 0.77 during the flight tests.



The Phenom 100 exposed to extreme cold



The Phenom 100 with flutter vanes installed



The fourth Phenom 100 performing cold soak test at Eglin Airspace Base

## The Phenom 300 Program

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### The First Flight

**The Milestone** – The Embraer Phenom 300, a standard-setter for the light jet category, successfully took to the air on its maiden flight on April 29, from the Company's Gavião Peixoto test runway. The aircraft's entirely digital development process, as well as the total commitment of the teams involved in the program, allowed moving up this flight, which was originally scheduled for mid-year. In the coming months, the first Phenom 300, number 99801, will participate in the flight test campaign along with three additional Phenom 300 jets. It is expected to enter service in the second semester of 2009.



The Phenom 300 first takeoff.



The Phenom 300 First Flight



## The Phenom 300 Program

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### The First Flight

**The first flight** – During the flight of one hour and twenty two minutes, Capt John Sevalho Corção and Embraer Chief Pilot Eduardo Alves Menini – who also was a crew member of the first flight of the Phenom 100 –, accompanied by flight test engineer Jens Peter Theodor Geiger Wentz, put the plane through a number of maneuvers, checking the aircraft's flight characteristics and the operation of its systems. Simultaneously, the engineering teams involved in the Phenom 300 flight test campaign were analyzing flight data transmitted in real time and supporting the flight test crew from the ground.



Flight crew: Capt. Corção, Capt. Menini, and Flight Test Engineer Wentz.



The flight celebration: (right to left) Frederico Fleury Curado congratulates Capt. Corção; Luís Carlos Affonso congratulates Capt. Menini next to Flight Test Engineer Wentz.

*“The crew is honored to have participated in this important event, representing the great work of hundreds of people whom we congratulate,” said Capt. Corção. “The quality of the Phenom 300 design and onboard high technology provided a very smooth and pleasant flight, increasing the thrill of flying the aircraft for the first time.”*



## The Phenom 300 Program

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### The Phenom 300 milestones

**May '05** – Embraer announced the development of two new executive jets for the very light and light segments.

**November '05** – The Company unveiled the Phenom models at the National Business Aviation Association (NBAA) event in United States.

**September '06** – The Phenom 300 joint definition phase was concluded.

**March '07** – The first metal cut occurred at Embraer's headquarters.

**November '07** – The sub-assembly process and fuselage mating was concluded in Botucatu, São Paulo.

**February '08** – The wing and engines were installed as digitally simulated beforehand.

**March '08** – The first electrical power-on test was performed in an entirely automated process, 60% faster than the traditional method.

**April '08** – The first Phenom 300 was rolled out from the production hangar, upon the final assembly conclusion.

**April '08** – The Phenom 300 took flight for the first time, departing from Embraer Gavião Peixoto's runway.

